

JAN 31 2007

**REMARKS**

Favorable reconsideration of this application is respectfully requested in view of the above amendments and following remarks. Claims 1 and 20 are editorially amended. Claim 19 is canceled without prejudice or disclaimer. No new matter has been added, and Applicant respectfully submits that the amendments made do not raise new issues. Claims 1 and 20-22 are pending.

Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Profitt et al. (US Provisional Application 60/360880). Applicant respectfully notes that the provisional application itself is not a reference under 35 U.S.C. 102(a), (b), or (e), and that this rejection should refer to the PCT publication WO 03/075008. For purposes of this paper alone, Applicants will assume the material from the provisional application relied on by the rejection was published in the PCT publication. Applicant respectfully traverses this rejection.

Claim 1 is a test piece for a protein assay. Claim 1 requires the test piece to contain, among other features, a particular cationic surfactant selected from the group consisting of benzyltrimethylammonium bromide, hexadecyltrimethylammonium bromide, lauryltrimethylammonium bromide, and zephiramine.

Claim 1 enjoys benefits in that the test piece can quantify or semi-quantify the concentration of a protein, where the coloration sensitivity of tetrabromophenol blue (TBPB) contained in the test piece is remarkably increased by the addition of a specific surfactant or surfactants. More specifically, the claimed invention is limited only to specific combinations of TBPB and surfactants which have been experimentally demonstrated as being effective for increasing the coloration sensitivity of TBPB (see Examples 1-3 and 5-7).

Profitt et al. does not teach or suggest claim 1. Profitt et al. enumerates various examples of cationic surfactants. However, those examples do not include benzyltrimethylammonium bromide, hexadecyltrimethylammonium bromide, lauryltrimethylammonium bromide, and zephiramine. For at least this reason, Profitt et al. does not disclose or suggest claim 1.

Furthermore, the reference does not provide any suggestion or guidance that would lead one to use any particular cationic surfactant to achieve the effects of the

present invention. To the contrary, Profitt et al. focuses on the particular dye reagents used for its diagnostic test device, while the surfactant component is a subsidiary aspect of the reference. The reference teaches that there is no criticality in the surfactant used, while in the present invention the surfactant selection is significant. Again, claim 1 is directed to the selected cationic surfactants that have been demonstrated to provide excellent color-reaction combination with TBPB. (See Examples 1-3 and 5-7.) There is nothing in the reference that would lead one to the combination of cationic surfactants and TBPB required by claim 1, and there is no reasonable basis to assume that any of the specific cationic surfactants mentioned in Profitt et al. would provide the effects of the present invention. Thus, Profitt et al. does not teach or suggest the features of claim 1 or the advantageous results of the present invention.

Favorable reconsideration and withdrawal of the rejection are respectfully requested.

Claim 19 is rejected under 35 U.S.C. 102(b) as being anticipated by Omoto et al. (US 5183742). Claim 19 has been canceled, rendering this rejection moot. Applicant does not concede the correctness of the rejection.

Withdrawal of the rejection is respectfully requested.

Claims 20-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Profitt et al. in view of Omoto et al (US 5183742) and Kosaka (US 5955027). Applicant respectfully traverse this rejection to the extent it is maintained.

Claim 20 is a test piece for a protein assay. As with claim 1, claim 20 requires the test piece to contain, among other features, a cationic surfactant selected from the group consisting of benzyltrimethylammonium bromide, hexadecyltrimethylammonium bromide, lauryltrimethylammonium bromide, and zephiramine. Claim 20 also enjoys benefits in that the test piece can quantify or semi-quantify the concentration of a protein, where the coloration sensitivity of tetrabromophenol blue (TBPB) contained in the test piece is remarkably increased by the addition of a specific surfactant or surfactants. More specifically, the claimed invention is limited only to specific combinations of TBPB and surfactants which have been experimentally demonstrated as being effective for increasing the coloration sensitivity of TBPB (see Examples 1-3 and 5-7).

The deficiencies of Profitt have been detailed above. Profitt does not disclose or suggest a cationic surfactant that is selected from the group consisting of benzyltrimethylammonium bromide, hexadecyltrimethylammonium bromide, lauryltrimethylammonium bromide, and zephiramine. While Profitt mentions some examples of cationic surfactants, those examples do not include benzyltrimethylammonium bromide, hexadecyltrimethylammonium bromide, lauryltrimethylammonium bromide, and zephiramine. As noted, the reference does not provide any guidance as to using any particular cationic surfactant that would provide the effects of the present invention, much less the specific cationic surfactants required by the claim. In fact, claim 20 is limited to the selected cationic surfactants that have been demonstrated to provide excellent color-reaction combination with TBPB. (See Examples 1-3 and 5-7.) There is nothing in the reference that would lead one to the combination of cationic surfactants and TBPB required by claim 20, and there is no reasonable basis to assume that any of the specific cationic surfactants mentioned in Profitt et al. would provide the effects of the present invention. Thus, Profitt et al. does not teach or suggest the features of claim 20 or the advantageous results of the present invention. Kosaka and Omoto et al. do not remedy the deficiencies of Profitt et al. For at least the foregoing, claim 20 and its dependents are allowable over the references cited.

Favorable reconsideration and withdrawal of the rejection are respectfully requested.

In view of the above amendments and remarks, Applicant believes that the pending claims are in a condition for allowance. Favorable consideration in the form of a Notice of Allowance is respectfully solicited. If any questions arise regarding this communication, the Examiner is invited to contact Applicant's representative listed below.



Dated: January 31, 2007

Respectfully submitted,

HAMRE, SCHUMANN, MUELLER &  
LARSON, P.C.  
P.O. Box 2902  
Minneapolis, MN 55402-0902  
(612) 455-3800

By: 

Douglas P. Mueller  
Reg. No. 30,300  
DPM/baw